

5 **ABSTRACT**

10 Provided by the present invention is a method of pumping and related arrangement for multi-phase fluid flow wherein a centrifugal pump is used for the suction and delivery of the multi-phase fluid which has a fluid communication providing means to provide a communication of fluid bled from the outlet at a higher pressure to be injected into the inlet conduit of the centrifugal pump is in operation. The centrifugal pump is provided with an impeller which has a plurality of vanes configured to define there between larger passageways when compared to a conventional centrifugal pump which would operate in or near optimum conditions when pumping liquid only.